

**Before The  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
E911 requirements for IP-Enabled Service Providers	)	WC Docket No. 05-196
	)	
	)	

**COMMENTS OF THE  
WASHINGTON STATE ENHANCED 911 PROGRAM**

**INTRODUCTION**

The Washington State Enhanced 911 Program is charged with assuring that the residents of The State of Washington continue to be served by the best practicable access to emergency services by dialing 911 from telephone systems.

The Commission's rapid and assertive efforts to assure that telephone services using VoIP technology meet the general expectation for Enhanced 911 access are to be applauded. Not would delays in implementation of E911 capabilities endanger lives, they would result in an embedded base of VoIP services that may need to be addressed as a retrofit adding expense and confusion to the process.

**COMMENTS**

The following comments are submitted in reference to specific questions raised by the Commission.

1. What can the Commission do to facilitate the development of techniques for automatically identifying the geographic location of users of this type of VoIP service?

The Commission should consider the critical nature of the need to accurately locate 911 callers as a public safety issue that needs ongoing attention, particularly in situations where callers may be within buildings or other structures where wireless devices work but current location technologies are ineffective. Mobile devices are becoming the standard for much communications and the users of those devices will expect to contact 911 in emergencies regardless of their location. It is suggested that a common location signaling platform may be applicable to all wireless devices and if deployed on a joint basis would provide superior location capabilities.

What role should the Commission play to further the evolution of E911 service and E911 systems that do not depend on a customer providing his or her location information?

The Commission should encourage cross industry participation in a design effort to research potential location technologies that could provide assured single digit meter accuracy in all instances with these technologies supported by and available to all services. The Commission is uniquely positioned to forward these designs because of their longstanding expertise in radio systems, their ability to work internationally to promote worldwide solutions, and their ability to adjust frequency allocations should minimal bandwidth be needed for location signaling or for transmittal of location information outside dedicated service assignments. Such a system developed to be compatible with Geographic Positioning System and Galileo would provide location capability that not only services E911 needs but also other commercial applications.

What role would be most productive for the Commission to play in facilitating the adoption of one or more of these possible solutions, or facilitating some other solution, to automatically identify a VoIP service customer's location?

A critical role of the Commission in forwarding a ubiquitous location signaling system will be providing international influence for adoption of the system in other major markets to assure that the technology is not acquired at a premium for companies operating in the United States.

Under what authority could the Commission take such actions?

Such a system would not only meet the Commission's obligations for consumer protection but may well lead to improved use of assigned frequency assignments.

2. We also seek comment on issues raised by our decision today to impose E911 service obligations on providers of interconnected VoIP services.

The scope of today's Order is limited to providers of interconnected VoIP services. We seek comment on whether the Commission should extend these obligations, or similar obligations, to providers of other VoIP services that are not covered by the rules adopted today. For instance, what E911 obligations, if any, should apply to VoIP services that are not fully interconnected to the PSTN?

Specifically, should E911 obligations apply to VoIP services that enable users to terminate calls to the PSTN but do not permit users to receive calls that originate on the PSTN?

Yes, a call to 911 is by its nature a call to a critical service that is a part of the basic service package associated with access to the PSTN.

Should E911 obligations apply to the converse situation in which a VoIP service enables users to receive calls from the PSTN but does not permit the user to make calls terminating to the PSTN?

These services should be exempted only if it is abundantly clear that future upgrades that would permit calls to the PSTN would at the moment of upgrade result in E911 service being mandated.

1. Does the Commission need to adopt regulations in addition to those imposed by today's Order to ensure that interconnected VoIP service customers obtain the required level of E911 services?

It may be beneficial to not only the VoIP industry but also other carrier technologies for the Commission to adopt rules that encourage collaboration on facility utilization by carriers that would limit costs of E911 interconnection. The example is the general requirement that carriers provide connection to E911 selective routers for all locations where they have customers. The total number of customers for an aggregate of players in a market may justify only a single diverse connection to the selective router from a common distant area where today each carrier will be installing facilities.

It is our expectation that end-user updates of Registered Location information will take place immediately. If this is not feasible, what performance standards should the Commission adopt regarding the length of time between when an end user updates Registered Location information and when the service provider takes the actions necessary to enable E911 from that new location?

It should be anticipated that the records are updated within 24 hours. If the service provider's capability for auditing the customer input for address accuracy can be accomplished real time then the customer would have 24 hours to enter the correct address. That 24 hour expectation should be reduced based on the length of time for normal records audit and updates in the service providers system.

How should such requirements be structured?

It should be structured as a clear requirement on the service provider to include such an update requirement in their service designs.

How should providers of interconnected VoIP service satisfy the requirements we adopt today in cases in which a subscriber's Registered Location is not associated with a street address?

If the above mentioned ubiquitous location capability was implemented the equipment could locate the subscriber to a latitude longitude coordinate.

What requirements, if any, should we impose on providers of interconnected VoIP service in geographic areas served by PSAPs that are not connected to a Selective Router?

The Commission should continue to work with the states and carriers to assure that Enhanced 911 is ubiquitous throughout the United States not only to provide a uniform level of access to public safety services but also to assure that VoIP and other providers have an equally uniform platform on which to build interconnect products.

How should the use of wireless broadband connections such as Wi-Fi or WiMax impact the applicability of the obligations we adopt today?

All mobile or semi-mobile services should be included in the location systems with the Wi-Fi or WiMax systems also broadcasting the location signals to permit very accurate location.

Would providers of wireless interconnected VoIP service be more appropriately subject to our existing 911/E911 rules for commercial mobile radio service?

No. The existing rules for wireless provide location parameters that are far too broad to be of value in dense service locations.

Should the Commission require VoIP service providers to create redundant systems for providing E911 services, such as requiring redundant trunks to each Selective Router and/or requiring that multiple Selective Routers be able to route calls to each PSAP?

Network Best Practices appropriately include diverse and redundant connections to the selective Routers. Compliance with these and other best practices should be encouraged for all carriers. These best practices certainly should not be discounted because of the type technology a carrier is utilizing for transmission of messages.

2. Should the Commission impose reporting obligations on VoIP service providers other than the compliance letter we impose in today's Order?

Should the Commission require interconnected VoIP providers to report what progress they are making in developing ways to locate automatically a user who dials 911?

Yes, and in particular in concert with the states and consumer protection groups. Both for the benefit of the consumer and for the carriers who can by observing the progress of others in a particular area seek collaborative relationships to build the common need for E911 service.

Should the Commission require reporting of any other information by interconnected VoIP providers?

It is critical that carriers be absolutely current in their reporting of 24x7 contact information for purposes of Public Safety Agency contacting them for customer information in emergencies.

3. We seek comment on what role states can and should play to help implement the E911 rules we adopt today.

Should state and local governments play a role similar to the roles they play in implementing the Commission's wireless 911/E911 rules?

Yes, The Commission established a cooperative working relationship with states to forward the implementation of wireless and that relationship should be forwarded to assist with VoIP issues. In particular the Commission should achieve to implement a process whereby states can ask questions and report

service impacting situations outside of the normal formal reporting process with a clear intent to discover nuances that can be addressed proactively in a less than regulatory fashion.

Should the Commission take any action to facilitate the states' ability to collect 911 fees from interconnected VoIP providers, either directly or indirectly?

The Commission may be able to define nexus for VoIP carriers that would clarify when a carrier has presence in a state and therefore an obligation to meet state E911 tax collection obligations. The nature of VoIP service being somewhat connected to internet regulations has made the question of establishing nexus a difficult one for states that can vary based on case law. A clear definition would forward state collection of E911 fees while permitting VoIP carriers to clearly know when their services meet the presence requirement. The Commission can also facilitate the formation of information on tax submittal requirements through web page links or similar means to ease the burden on VoIP providers to search for current state rules.

How can the Commission and the states work together to ensure the public's safety?

The Commission began a program of working with state E911 leaders on wireless issues. That program should be continued and expanded to gain input and support for nationwide actions to forward public safety issues, and in particular those issues that relate to assuring reliable access to emergency assistance by dialing 911.

4. Should the Commission adopt any customer privacy protections related to provision of E911 service by interconnected VoIP service providers?

Rules for VoIP should parallel those of wireless and landline that assure access to customer information appropriate to the 911 function of dispatching assistance.

5. Finally, we seek comment on whether persons with disabilities can use interconnected VoIP service and other VoIP services to directly call a PSAP via a TTY in light of the requirement in Title II of the Americans with Disabilities Act (ADA) that PSAPs be directly accessible by TTYs.

The deaf community was an early adopter of IP technologies for communications. Today a large percentage do virtually no communications over TTY devices, instead relying on fixed and portable IP based tools. An exception is their need to have a TTY for access to 911. Because these individuals have internet access the Commission should take immediate steps to forward initiatives that will permit them to access 911 services using their most familiar communications tools.

VoIP providers should be required to certify if their Analog Terminal Adaptors are TTY capable for purposes of processing calls to 911. This requirement should

only be for certification and for unit and packaging labeling to give deaf consumers an option of acquiring a VoIP service rather than the traditional telephone line to be able to use a TTY.

The Commission should begin a directed design effort in cooperation with industry leaders and the Department of Justice to deploy in the minimum time frame possible a capability, nationwide, for deaf and hard of hearing specific access to 911 services via internet based text devices as a replace for TTY access.

## **CONCLUSION**

The Commission has established a standard for proactive intervention in the case of VoIP telecommunications services. It should follow up on that with a pragmatic approach to providing long term capabilities that forward public safety and in particular location determination capabilities that will be available to all devices. The advent of being able to locate persons requesting assistance based on their current address is quickly becoming history. VoIP presents an opportunity in this arena to move forward to the benefit of many technologies.

Respectfully Submitted

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